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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

MAILED

Application Number: 10/068,369
Filing Date: February 06, 2002
Appellant(s): HAGMEIER ET AL.

OCT 1 9 2006

GROUP 3600

Gerald R. Woods
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 7/31/2006 appealing from the Office action mailed 12/15/2005.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

| 6,119,933 | Wong | 9-2000 |

6,889,198   Kawan   5-2005

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1 and 3-10 are rejected under 35 U.S.C. 103(a) as being obvious over

Wong (6,119,933) in view of Kawan (6,889,198).

As per independent claim 1, Wong (FIG. 4, el. *"Object 3:1"*) and el. *"Object 3:2"*

discloses: a *"Back-end"* computer.

Wong (FIG. 2, el. *"Object 1:7"*) discloses: *"DBMS. . . ."*

Wong (col. 2, ll. 3-5;and the ABSTRACT) discloses: *"frequency award point"* and *"A*

customer frequency, analysis and reward system. . . ."

Wong (FIG. 12) shows a "spreadsheet. . . ."

Wong (FIG. 1) shows a " communication link connecting [computers]. . . ."

Wong (the ABSTRACT; FIG. 1; FIG. 2A; FIG. 2B; FIG. 3; FIG. 4; FIG. 5; FIG. 6A;

FIG. 6B; FIG. 6C; FIG. 7; FIG. 8; FIG. 10; FIG. 11; FIG. 12; FIG. 14; FIG. 15; FIG. 16; FIG.

18; col. 1, ll. 4-67; col. 2, ll. 1-22; col. 2, ll. 42-67; col. 3, ll. 21-67; col. 4, ll. 5-67; col. 5, ll. 7-

67; col. 6, ll. 1-67; col. 8, ll. 10-67; col. 1-67; col. 10, ll. 1-67; and col. 11, ll. 1-67) shows: "a

back-end computer having a first database for storing loyalty . . . and user data. . . ."

As per dependent claim 3, Wong shows the system of claim 2.

Wong (FIG. 1) discloses a *"P.O.S. DEVICE. . . ."*

Wong (col. 3, ll. 35-55) shows: *"credit card"* utilization.

<u>Wong</u> (col. 9, ll. 47-61) discloses: *"Spreadsheet Net Sales" and "Dollars Sold. . . ."*

As per dependent claim 4, <u>Wong</u> shows the system of claim 2 or claim 3.

<u>Wong</u> (FIG. 1) discloses a "front-end" *"P.O.S. DEVICE. . . ."*

Claim 5 is rejected at least for substantially the same reasons as claim 1.

Claim 6 is rejected at least for substantially the same reasons as claim 1.

Claim 7 is rejected at least for substantially the same reasons as the "communication

link" element of claim 1.   (Also, see <u>Wong</u> (FIG. 1)).

Claim 8 is rejected for at least substantially the same reasons as claims 6, 7 & 3.

Claim 9 is rejected for the same reasons as claim 1.

As per dependent claim 10, <u>Wong</u> shows the method of claim 9.

<u>Wong</u> (col. 5, ll. 35-55) discloses: *"award amount (i. e., 'cost') . . . processing."*

Additionally, Wong discloses a rewards system for user loyalty that utilizes a back-end

and front-end database for storing user information and user transaction information, and that the

back-end and front-end databases can be synchronized, and also the utilization of a marketing

computer:

"[Claim]   6. A customer frequency, analysis, and reward system administered by a

first entity comprising:

a point of sale (POS) data collection device capable of inputting POS

customer transaction data, including a customer profile ID, wherein the POS

data collection device is configured to identify a customer with a number

previously assigned to the customer by an unrelated second entity;

a local <u>database</u> closely coupled to the point of sale device for <u>storing</u>

customer profiles;

a central data warehouse, periodically <u>updated</u> by data in said local

<u>database, for storing</u> all customer profiles and transaction details from a

number of POS local <u>databases;</u>

a set of analytical information tools, with access to said data warehouse,

for performing customer frequency and transaction analysis and generating

meaningful information including spending trends and customer frequency; and

a customer loyalty reward system, with access to data in said data

warehouse, for maintaining information regarding customer frequency in order to

provide an awards program as an incentive for a customer participating in said

customer analysis system" (col 13, line 4-col 14, line 15).

Wong further discloses that the user utilizes a POS device at a retailer and that the

transactions involve the loyalty program (Fig. 1 and below):

"(3) According to one embodiment, a customer interacts with the system initially at a

data collection point-of-sale POS) device at a retail outlet or other place where a customer

interacts with the seller (or user of the system). This POS device may include a magnetic card

reader for reading a magnetic stripe on a <u>credit</u> card or other customer loyalty card, or may

include a keyboard for entering customer ID information, or may include a check scanner

for reading the number of a customer checking account, or may include a biometric input device

such as a fingerprint reading technology, or any other device for identifying and validating the

identity of a particular customer or group/family of customers" (col 1, lines 17-30).

Wong discloses a point-of-sale terminal associated with the front-end computer (Fig. 1)

Wong further discloses performing validations at the POS terminal to determine if the user can participate in the loyalty program:

"(4) Once the customer data is read by the POS device, it is compared against a local database which is generally at the retail establishment or quickly accessible to the retail establishment. A match is attempted in the local database from whatever data is collected from the customer. According to one embodiment of the invention, the database will have multiple input points so that a customer does not need to provide a single ID for a loyalty system but the customer's identity may be determined from any of the possible inputs including different credit cards, a number of different checking accounts, a driver's license, or any other ID methodology (col 1, lines 30-42).

Wong discloses performing marketing analysis at a central location utilizing data obtained from the POS terminal:

"(6) According to the invention, furthermore, there may be provided a data warehouse. The function of the data warehouse is to collect all generated customer data on a daily basis and to compile customer profiles about each customer in order to enhance marketing to that customer. External information may be compared against the data warehouse such as demographic data or any other data available about particular customers or groups of customers. A number of analytic tools may be performed to provide meaningful analysis desired by the sellers of their customer profiles, such as identifying spending trends, customer preferences, or the like. In one embodiment of the invention, the central database used for customer validation and the data warehouse are the same database (col 1, line 55-col 2, line 4);

(6) Other features also may be included in specific embodiments of the invention,

including: (1) Remote location collection of customer visit and POS transactional data; (2) End

of day transmission of the data; (3) Translation and <u>storage</u> of data in membership & POS

<u>database</u> (data warehouse); (4) Hard copy and on-line individual reports of membership

information; (5) Hard copy and on-line reports on the frequency of customer visits; (6) Hard

copy and on-line reports on sales information linked to customer visits; (7) Weekly and monthly

transmission of summarized data <u>back</u> to customer sites for analysis;

(7) Remote Data Collection POS Input

(8) At the remote location, the system can be an existing DOS or Windows based POS

device with a magnetic-strip reader or other input device to collect customer frequency

information or, for locations without the adequate POS equipment, an external card reader with

built in modem and printer may be installed. In cases where a credit card is used to identify

customers, a device will be used to read an existing credit card, and only pick up the last

several digits of the card number. The purpose for this is convenience to the customer, comfort

level of security, used as the member identification number, and is a cost saving to users of the

invention of not having to produce membership cards. The device prompts the user of the

system for any requested information, <u>stores</u> the data and transmits to the host system on a daily

basis. A small printer is attached to print a transaction receipt with membership information,

date and time of visit, and points added. The communication link between the remote locations

and host can be dial up phone service, sprintnet or telenet type service, T1.5 access, or

dedicated line service all contingent upon client needs (col 3, lines 20-55);

(11)   The user of the remote data capture device will take input from an existing credit

card, smart card, private label card, or biometric device and record the member identification.

If the member does not have an input card, the screen can prompt the server to manually enter a

member number. The screen can allow entry of the guest receipt number and total amount of

receipt. <u>Generally, the collected information will be stored on the POS device until at</u>

<u>the end of the day, when the device batches and transmits the EOD file to the host network.</u>

<u>The POS transactional data is transmitted to the host network and the combined data is used to</u>

<u>correlate and provide relevant management reports</u>" (col 3, line 65-col 4, line 10).

Wong further discloses the utilization of databases and data organizing means:

"(16)   Reports--Accessing the <u>databases</u> and presenting the information in an

understandable and useful format is a primary objective. Predefined reports and online queries

against the <u>database</u> are important features of the embodiment" (col 4, lines 24-30).

Wong discloses the utilization of points, calculations of points providing, and the

utilization of smart cards:

"(7)   According to a further embodiment of the invention, the system keeps track of

customer frequency award <u>points</u> in order to encourage customers to participate in the system.

A mechanism is provided for customers to directly interact with this customer <u>loyalty</u> system in

order to determine their eligibility for awards, or other information, based on their patronage of

particular retailers that participate in the customer <u>loyalty</u> system. According to one

embodiment, this interface is provided via the World Wide Web over the Internet wherein

customers are allowed to interact directly with aspects of the data warehouse, to view their

customer information, and to make corrections to such identifying information as telephone numbers and addresses.

(8)   According to a further embodiment of the invention, a customer may be given a smartcard, which records customer award <u>points</u> as well as other customer data such as customer preferences or frequency of visits. The invention will be understood better with reference to the following detailed descriptions of the drawings" (col 2, lines 3-23).

Wong further discloses utilizing tables and database for transaction processing (Fig. 2b; Fig. 5; Fig. 6a; Fig. 6c).

Wong does not explicitly disclose that the central/back end computer updates the loyalty rules stored on the POS/front end computer.

However, Kawan discloses updating or synchronizing the back end computer with information and transaction information on users from the front end computer:

"(14)   In an embodiment of the present invention, as another alternative, the stand alone terminal 2 has the capability to print out summary information for the local merchant on printer 14. The merchant can print out daily/weekly/monthly reports on the loyalty <u>program</u> usage and other <u>program</u> information. These reports are useful in auditing total points given to customers, total points redeemed, and other similar information. As an additional alternative, the loyalty <u>program</u> 28 reports the update of the loyalty register 40 <u>back</u> to the stand alone terminal 2, and the stand alone terminal uploads the update to a <u>back</u> office loyalty server" (col 8, lines 5-15).

Kawan discloses that loyalty rules on front end are updated from and synchronized with the back end and that the front end rules are utilized for processing transactions at the POS terminal:

"(24)   In an embodiment of the present invention, a merchant may wish, for example, to run specials such as on a particular day of the week to award the consumer double points if the consumer uses the card 4 at a certain time of day, such as between 2:00 pm and 4:00 pm. In order to accomplish that, since the terminal records the merchant identifier 42, for example, a couple of bytes of the merchant identifier is used to specify specific kinds of updates. For example, either a central system or the merchant loads into the terminal, remotely or locally, the variation of the two bytes into the merchant's identifier 42. Thus, when the terminal operates and commands "do loyalty update," or when the transaction takes place and the transaction is stored in the transaction record 26 of the card 4, when the loyalty application on the card looks at the merchant identifier 42 and compares the merchant identifier, it uses that information to adjust how the points are added to the card, either one to one, or with some multiplier, or with some other variation to award loyalty points" (col 10, lines 30-50).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add Kawan's front end rules updated by the back end to Wong's processing transactions at the front end/POS terminal. One would have been motivated to do this in order to provide Wong with the capability of adjusting how transactions are handled as Wong performs marketing analysis and better understands how to interact with the user.

Hence, the combination of Wong and Kawan renders obvious at least one front-end computer that also contains a database for storing the loyalty program rules and user data as well

as a spreadsheet engine for processing user transaction data in accordance with the loyalty

program rules stored in the front-end computer. . .includes a communications link for

maintaining synchronization between the loyalty program rules stored in the back-end computer

and the front-end computer.

The below citations and explanations are copied from the Response to Arguments in the

Final Rejection dated 12/15/2005.

Additionally, Applicant's Specification (10,068,369 or 2002/0120514) discloses utilizing

cards or smart cards in transactions involving a loyalty program:

"[0033] The front-end computer 77 captures user and transaction data which are

provided by means of a manual input operation, a customer card, such as a smart

card, or similar devices.

[0037] FIG. 8 shows a flow chart illustrating an embodiment of the method of

the invention. In step 1 a user ID is inputted into the front-end computer. This can be done

manually or by means of a smart card or other authentication means."

And, Kawan's disclosure of utilizing a card does not prevent Kawan from being utilized

as prior art relevant to features concerning loyalty programs and POS terminals/front end

computers and central/back end computers.

And, Kawan discloses utilizing a stand alone terminal and a merchant terminal (Fig. 1

and Fig. 6; Fig. 7; Fig. 8).

Kawan discloses that the comparison and adjusting and authentication can be performed

at the terminal and outside or external of the card:

"(17)   In an embodiment of the present invention, in order for such a loyalty program to comply with pre-existing card rules, such as VISA Cash card rules, it is necessary to use an external terminal, such as stand alone terminal 2, to separately access the VISA Cash card transaction record 26 and the loyalty records 40, essentially in order to perform the comparison on the outside and update to the card 4. In such a process, since the loyalty update is operating outside the card 4, it is necessary to have a security mechanism, including a special key, called a loyalty key, that resides in terminal 2, for authentication at S21 as shown in FIG. 7. The loyalty key residing in the terminal 2 allows secure update of the loyalty register 40. Without such a loyalty key in terminal 2, anyone could put the card 4 into the terminal, or into a simulation of the terminal, and arbitrarily add loyalty points to the card" (col 8, line 50-65).

Kawan further discloses updating the terminal and updating the central system with information from the terminal (col 9, lines 5-15).

Also, notice in Kawan that the terminal, local or remote, is updated by the central system with the merchant identifier information/rules which specify the reward updates:

"(24)   In an embodiment of the present invention, a merchant may wish, for example, to run specials such as on a particular day of the week to award the consumer double points if the consumer uses the card 4 at a certain time of day, such as between 2:00 pm and 4:00 pm. In order to accomplish that, since the terminal records the merchant identifier 42, for example, a couple of bytes of the merchant identifier is used to specify specific kinds of updates. For example, either a central system or the merchant loads into the terminal, remotely or locally, the variation of the two bytes into the merchant's identifier 42. Thus, when the terminal operates and commands "do loyalty update,"" (col 10, lines 30-40).

Kawan further discloses that it is old and well known that a POS terminal connected to a

back end computer can perform loyalty program functions:

"For example, a consumer using a smart card as a <u>stored</u> value card makes a purchase

from a merchant using, for example, a merchant terminal. Loyalty points for the purchase may

be put on the card at the merchant terminal by modifying the merchant terminal to accomplish

this function. There also must be an intermediate system that collects the points and passes

them forward to a host processor or central computer. A great deal of effort and expense is

required to initiate such a system, because it interacts with and requires <u>changes</u> to the other

terminal software.

(6)   Such additions and modifications to terminal software also require significant effort

in testing and validation. As such, loyalty systems of this type require a significant investment

in equipment, as well as time and centralized management, to oversee the entire process.

Another disadvantage of running a loyalty program off a modified merchant terminal is

reduction in throughput. Allocating and redeeming loyalty points at the modified merchant

terminal increases transaction time, causes longer check-out lines, and creates a need for more

personnel" (col 1, lines 30-50).

Kawan further discloses synchronizing the loyalty information on the terminal and the

back end computer (col 3, lines 25-46 and below)

"As an additional alternative, the loyalty program 28 reports the <u>update</u> of the

loyalty register 40 back to the stand alone terminal 2, and the stand alone terminal uploads the

<u>update</u> to a back office loyalty server" (col 8, lines 12-16).

Kawan further discloses that the terminal can perform loyalty functions and update card with loyalty program related information:

"(4) In an embodiment of the present invention, the stand alone terminal 2 activates the smart card loyalty capability on first usage or by other terminal initialization means by establishing a selected loyalty application 28 on microcomputer 6 of card 4. The terminal 2 can then display the current point balance, for example, on LCD screen 10, update a loyalty register of the loyalty program 28 and redeem loyalty points. The smart loyalty card system in an embodiment of the present invention is controlled by a local merchant without interaction with existing loyalty systems. Thus, frequent buyer-type loyalty programs can be easily established without the necessity, complexity and cost of integration with existing systems" (col 5, lines 30-45)

After authentication at S21, the stand alone terminal 2 compares information in the purchase log 24, such as the merchant identification number 32 and transaction number 30, to information in the loyalty register 40, such as the merchant identification number 42 associated with the particular merchant at S22. At S23, the stand alone terminal 2 adjusts the merchant loyalty register 40 to account for any unrecorded merchant transactions" (col 6, lines 47-54).

Kawan further discloses that the stand alone terminal can update the loyalty information and also that information can be changed on the stand alone terminal which is output from the terminal:

"(12) In an embodiment of the present invention, in addition to updating one or more merchant loyalty registers, the stand alone terminal 2 can be utilized to inquire about a

particular merchant loyalty register or to redeem loyalty points. . .The stand alone terminal 2

then <u>updates the specific</u> merchant loyalty register to account for the exchange at S36 and

prints out a coupon for use by the consumer at S37. The coupons can be standardized, for

example, to match the current coupon program of the merchant, such as by printing out a UPC

Code on the coupon. Also, the merchant can use the stand alone terminal 2 to enter a code,

which can be <u>changed</u> frequently, to be printed on the coupon for security purposes" (col 7,

lines 34-38 and col 7, lines 50-60).

Also, in regards to spreadsheet utilization, Wong and Kawan disclose records, tables, and

comparisons and Wong further discloses utilizing tables and database for transaction processing

(Fig. 2b; Fig. 5; Fig. 6a; Fig. 6c).

(10) Response to Argument

Examiner notes that it is the Applicant's claims as stated in the Applicant's claims that

are being rejected with the prior art. Also, although the claims are interpreted in light of the

specification, limitations from the specification are not read into the claims. See *In re Van*

Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). And, Examiner notes that claims are

given their broadest reasonable construction. See *In re Hyatt*, 211 F.3d 1367, 54 USPQ2d 1664

(Fed. Cir. 2000).

In the Appeal Brief dated 7/31/2006, Appellant states on page 6 that, "Earlier Office

actions have expressly admitted. . .of a 'front-end computer. . .'", Examiner does not know

which Office action the Appellant is referring to. The Examiner does not see where the most

recent Office Action dated 12/15/2005, contains such language as stated by the Appellant on page 6.

Also, Appellant states, beginning on page 5, that, "In the Wong system, customer loyalty information is described as only being stored in a central data warehouse. . .there is nothing in the Wong specification to suggest that a customer may interact with the customer loyalty system in any way other than over an interface 'provided via the World Wide Web over the Internet'". Appellant further states, "While the Wong specification does indicate that a point of sale system may include a local database, the only function that database appears to be used for is to identify the customer".

However, Examiner notes that teaching of a preference or of one option of many does not constitute a teaching away from the proposed combination under review. See In re Fulton, 391 F.3d 1195, 1199-1200, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004).

And, Wong does disclose a point-of-service device (P.O.S.) that is in communication with a back-end computer/central database (Fig. 1, POS Device) and that transaction and membership information can be stored in the POS device (Fig. 2a, Object, 1:1) and that the POS and membership tables at the POS device can be populated by a central database (Fig. 2a, Object 1:6).

Additionally, Wong discloses a rewards system for user loyalty that utilizes a back-end and front-end database for storing user information and user transaction information, and that the back-end and front-end databases can be synchronized, and also the utilization of a marketing computer:

"[Claim]1. A method for identifying a customer for administering a customer

frequency, analysis, and reward system comprising:

   obtaining from a customer customer identifying information such as name,
address and phone number;

   selecting a customer identification means, said means not requiring
assignment of a new customer identification number; and

   using said customer identification means to record customer transactions
details in a database local to a point-of-sale location.

   [Claim]   6. A customer frequency, analysis, and reward system administered by a

first entity comprising:

      a point of sale (POS) data collection device capable of inputting POS

customer transaction data, including a customer profile ID, wherein the POS

data collection device is configured to identify a customer with a number

previously assigned to the customer by an unrelated second entity;

      a local _database_ closely coupled to the point of sale device for _storing_

customer profiles;

      a central data warehouse, periodically _updated_ by data in said local

database, for storing all customer profiles and transaction details from a

number of POS local _databases_;

      a set of analytical information tools, with access to said data warehouse,

for performing customer frequency and transaction analysis and generating

meaningful information including spending trends and customer frequency; and

      a customer loyalty reward system, with access to data in said data

warehouse, for maintaining information regarding customer frequency in order to

provide an awards program as an incentive for a customer participating in said

customer analysis system" (col 13, line 4-col 14, line 15).

Wong further discloses performing validations at the POS terminal to determine if the

user can participate in the loyalty program:

"(4)   Once the customer data is read by the POS device, it is compared against a local

database which is generally at the retail establishment or quickly accessible to the retail

establishment. A match is attempted in the local database from whatever data is collected from

the customer. According to one embodiment of the invention, the database will have multiple

input points so that a customer does not need to provide a single ID for a loyalty system but

the customer's identity may be determined from any of the possible inputs including different

credit cards, a number of different checking accounts, a driver's license, or any other ID

methodology (col 1, lines 30-42).

Wong discloses performing marketing analysis at a central location utilizing data

obtained from the POS terminal:

"(6)   According to the invention, furthermore, there may be provided a data warehouse.

The function of the data warehouse is to collect all generated customer data on a daily basis and

to compile customer profiles about each customer in order to enhance marketing to that

customer. External information may be compared against the data warehouse such as

demographic data or any other data available about particular customers or groups of customers.

A number of analytic tools may be performed to provide meaningful analysis desired by the

sellers of their customer profiles, such as identifying spending trends, customer preferences, or

the like. In one embodiment of the invention, the central <u>database</u> used for customer validation

and the data warehouse are the same <u>database</u> (col 1, line 55-col 2, line 4);

(6)   Other features also may be included in specific embodiments of the invention,

including: (1) Remote location collection of customer visit and POS transactional data; (2) End

of day transmission of the data; (3) Translation and <u>storage</u> of data in membership & POS

<u>database</u> (data warehouse); (4) Hard copy and on-line individual reports of membership

information; (5) Hard copy and on-line reports on the frequency of customer visits; (6) Hard

copy and on-line reports on sales information linked to customer visits; (7) Weekly and monthly

transmission of summarized data <u>back</u> to customer sites for analysis;

(7)   Remote Data Collection POS Input

(8) . . .The device prompts the user of the system for any requested information, <u>stores</u>

the data and transmits to the host system on a daily basis. A small printer is attached to print a

transaction receipt with membership information, date and time of visit, and points added. The

communication link between the remote locations and host can be dial up phone service,

sprintnet or telenet type service, T1.5 access, or dedicated line service all contingent upon client

needs (col 3, lines 20-55);

(11)   The user of the remote data capture device will take input from an existing credit

card, smart card, private label card, or biometric device and record the member identification.

If the member does not have an input card, the screen can prompt the server to manually enter a

member number. The screen can allow entry of the guest receipt number and total amount of

receipt. <u>Generally, the collected information will be stored on the POS device until at</u>

the end of the day, when the device batches and transmits the EOD file to the host network.

The POS transactional data is transmitted to the host network and the combined data is used to

correlate and provide relevant management reports" (col 3, line 65-col 4, line 10).

Hence, Wong discloses much more than, "customer loyalty information is described as

only being stored in a central data warehouse" or that "there is nothing [indicating that] a

customer may interact with the customer loyalty system in any way other than over an interface

provided by the WWW" or that the only function that the POS appears to be used for is mere

identification of the customer.

As noted above, Wong explicitly discloses extensive data synchronization between the

front and back-end of user profiles, user activity, user transactions, etc. And, as Examiner noted

in the Final Rejection dated 12/15/2005, Wong does not explicitly disclose that the central/back

end computer updates the loyalty rules stored on the POS/front end computer.

However, Wong discloses that the POS device processes loyalty transactions at the POS

device without any immediate communication with the back-end/central database. And, the

POS device periodically updates the back-end device with information on loyalty transactions

that the POS has performed. Hence, the POS device has the necessary information and loyalty

rules to process loyalty transactions. And, as noted above, Wong discloses that the POS device

and back-end computer are in communication and the user profile, user activity, user

transactions, etc information can be synchronized between the front and back-end. Wong does

not explicitly disclose that the rules for processing can be synchronized. However, since the

POS operates on its own without immediate connection to the central database and because a

communication link occurs between the central database and the POS device, it would have

been obvious to one skilled in the art that the central database can update the POS device with

processing rules. One would be motivated to do this so that the POS device remains up to date.

Examiner notes that it must be presumed that the artisan knows something about the art

apart from what the references disclose. In re Jacobv, 309 F.2d 513, 135 USPQ 317 (CCPA

1962). The problem cannot be approached on the basis that artisans would only know what

they read in references; such artisans must be presumed to know something about the art apart

from what the references disclose. In re Jacoby. Also, the conclusion of obviousness may be

made from common knowledge and common sense of a person of ordinary skill in the art

without any specific hint of suggestion a particular reference. In re Bozek, 416 F.2d 1385,

USPQ 545 (CCPA 1969). And, every reference relies to some extent on knowledge or persons

skilled in the art to complement that which is disclosed therein. In re Bode, 550 F.2d 656,

USPQ 12 (CCPA 1977).

Also, Examiner notes that it is only Appellant's claim 5 that explicitly states that the

loyalty rules are synchronized. That is, Appellant's claim 1 states that the first and second

databases are synchronized. However, claim 1 does not state that all data is synchronized

including loyalty rules. Hence, Wong's synchronizing of user data between the first and

second databases is a disclosure of synchronizing the first and second databases of claim 1.

And, the combination of Wong and Kawan discloses synchronizing the first and second

databases including the loyalty rules.

Examiner notes that while specific references were made to the prior art, it is actually

also the prior art in its entirety and the combination of the prior art in its entirety that is being

referred to. Also, one cannot show nonobviousness by attacking references individually where

the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208

USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Hence, it is the combination of Wong and Kawan that renders obvious the features of the

Appellant's claims.

Beginning on page 6, Appellant further states, "The Kawan reference clearly does not

teach including a front-end computer device in a point-of-sale terminal to provide point-of-sale

customer loyalty program processing capability. . .the loyalty program application is resident

only on the smart card, not on a front end computer integrated into a point of sale terminal. . .In

actual fact, the Kawan 'front end' is the loyalty application resident only on a smart card, not on

a merchant terminal which might read the card".

However, Examiner notes that teaching of a preference or of one option of many does not

constitute a teaching away from the proposed combination under review. See In re Fulton, 391

F.3d 1195, 1199-1200, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004). And, Kawan's disclosure of

utilizing a card does not prevent Kawan from being utilized as prior art because of what else

Kawan discloses, namely, concerning loyalty programs and POS terminals/front end computers

and central/back end computers.

And, Wong already discloses many of these features. Kawan was added to Wong to

demonstrate that the processing rules of the POS device could be updated by the central

computer/back-end.

Kawan clearly discloses a POS device that can read a card, that the POS device can

process transactions, and that the POS device can communicate, interact, and synchronize with a

central/back-end computer (Figures 1, 7, 8; and below citations).

Kawan discloses synchronizing the loyalty information on the terminal and the back end

computer:

"As an additional alternative, the loyalty program 28 reports the update of the loyalty

register 40 back to the stand alone terminal 2, and the stand alone terminal uploads the update to

a back office loyalty server" (col 8, lines 12-16).

Kawan further discloses updating or synchronizing the back end computer with

information and transaction information on users from the front end computer:

"(14) In an embodiment of the present invention, as another alternative, the stand alone

terminal 2 has the capability to print out summary information for the local merchant on printer

14. The merchant can print out daily/weekly/monthly reports on the loyalty program usage and

other program information. These reports are useful in auditing total points given to

customers, total points redeemed, and other similar information. As an additional alternative,

the loyalty program 28 reports the update of the loyalty register 40 back to the stand alone

terminal 2, and the stand alone terminal uploads the update to a back office loyalty server" (col

8, lines 5-15).

Kawan discloses that loyalty rules on front end are updated from and synchronized with

the back end and that the front end rules are utilized for processing transactions at the POS

terminal:

"(24) In an embodiment of the present invention, a merchant may wish, for example, to

run specials such as on a particular day of the week to award the consumer double points if the

consumer uses the card 4 at a certain time of day, such as between 2:00 pm and 4:00 pm. In

order to accomplish that, since the terminal records the merchant identifier 42, for example, a couple of bytes of the merchant identifier is used to specify specific kinds of updates. For example, either a central system or the merchant loads into the terminal, remotely or locally, the variation of the two bytes into the merchant's identifier 42. . ." (col 10, lines 30-50).

And, Kawan discloses that the comparison and adjusting and authentication can be performed at the terminal and outside or external of the card:

"(17) In an embodiment of the present invention, in order for such a loyalty program to comply with pre-existing card rules, such as VISA Cash card rules, it is necessary to use an external terminal, such as stand alone terminal 2, to separately access the VISA Cash card transaction record 26 and the loyalty records 40, essentially in order to perform the comparison on the outside and update to the card 4. In such a process, since the loyalty update is operating outside the card 4, it is necessary to have a security mechanism, including a special key, called a loyalty key, that resides in terminal 2, for authentication at S21 as shown in FIG. 7. The loyalty key residing in the terminal 2 allows secure update of the loyalty register 40. Without such a loyalty key in terminal 2, anyone could put the card 4 into the terminal, or into a simulation of the terminal, and arbitrarily add loyalty points to the card" (col 8, line 50-65).

Also, notice in Kawan that the terminal, local or remote, is updated by the central system with the merchant identifier information/rules which specify the how to perform the reward updates:

"(24) In an embodiment of the present invention, a merchant may wish, for example, to run specials such as on a particular day of the week to award the consumer double points if the consumer uses the card 4 at a certain time of day, such as between 2:00 pm and 4:00 pm. In

order to accomplish that, since the terminal records the merchant identifier 42, for example, a

couple of bytes of the merchant identifier is used to specify specific kinds of updates. For

example, either a central system or the merchant loads into the terminal, remotely or locally, the

variation of the two bytes into the merchant's identifier 42. Thus, when the terminal operates

and commands "do loyalty update,"'" (col 10, lines 30-40).

Notice in this citation above that the rules that utilize special identifiers to specify

specific kinds of updates are updated or changed on the POS device/terminal/front-end device

by a central system/back-end device.

Kawan further discloses that it is old and well known that a POS terminal connected to a

back end computer can perform loyalty program functions:

"For example, a consumer using a smart card as a stored value card makes a purchase

from a merchant using, for example, a merchant terminal. Loyalty points for the purchase may

be put on the card at the merchant terminal by modifying the merchant terminal to accomplish

this function. There also must be an intermediate system that collects the points and passes

them forward to a host processor or central computer. . . ." (col 1, lines 29-36).

Kawan further discloses that the terminal can perform loyalty functions and update the

card with loyalty program related information:

"(4) In an embodiment of the present invention, the stand alone terminal 2 activates the

smart card loyalty capability on first usage or by other terminal initialization means by

establishing a selected loyalty application 28 on microcomputer 6 of card 4. The terminal 2 can

then display the current point balance, for example, on LCD screen 10, update a loyalty register

of the loyalty program 28 and redeem loyalty points. . . (col 5, lines 30-45)

After authentication at S21, the stand alone terminal 2 compares information in the

purchase log 24, such as the merchant identification number 32 and transaction number 30, to

information in the loyalty register 40, such as the merchant identification number 42 associated

with the particular merchant at S22. At S23, the stand alone terminal 2 adjusts the merchant

loyalty register 40 to account for any unrecorded merchant transactions" (col 6, lines 47-54).

Hence, Kawan discloses a front-end computer device in a point-of-sale terminal that

provides point-of-sale customer loyalty program processing capability. And, more importantly,

Kawan was added to Wong to demonstrate that the processing rules of the POS device could be

updated by the central computer/back-end as disclosed by Kawan in the citations and

explanations preceding.

On page 7, Appellant states, ". . .a local copy of loyalty program rules is maintained in a

point-of-sale computer. Neither Wong or Kawan discloses or suggests this."

However, the combination of Wong and Kawan, see the citations and explantions in this

Response to Arguments sections preceding, discloses a POS device that provides a point-of-sale

customer loyalty program processing capability. And, in order to provide the loyalty processing

at the point-of-sale device, Wong and Kawan use loyalty rules/identifiers to identify specific

transactions as relevant, etc. And, as further noted above, Wong performs the loyalty

transactions at the POS device without immediate access to the central database/back-end.

Wong updates the back-end with the transactions information that has occurred at the POS

front-end. Therefore, the front-end of Wong has all the information and capability it needs in

order to process the POS loyalty transactions. It is after the POS transactions have occurred that

Wong updates the central database/back-end with the information on the loyalty transactions

that the POS device has performed. And, the POS device utilizes rules/identifiers in order to

process loyalty transactions. And, Kawan discloses updating the data/identifiers/rules on the

POS device for loyalty transaction processing.

Hence, the combination of the prior art renders obvious the features of the Appellant's

claims.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related

Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Arthur Duran

Primary Examiner

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Conferees:

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